

Application Serial No. 10/655,632

Attorney Docket No. 80116

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (original): A method of generating a predetermined field of cavitation around a remote target in an underwater environment, said method comprising the steps of:

 identifying a remote target in an unconfined underwater location;

 generating at least two acoustic beams from an underwater acoustic source; and

 controlling said at least two generated acoustic beams to intersect with each other at said identified remote target location and whereby a cavitation field is created at said intersection.
2. (original): The method according to claim 1 wherein said remote target location is in the range of 100m to 1 km from the acoustic source.

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3. (original): The method according to claim 1 wherein said remote target location is at least 100m from the acoustic source.
4. (original): The method according to claim 1 wherein said remote target location is no more than 1 km from the acoustic source.
5. (original): The method according to claim 1 wherein said acoustic beams are generated in a range frequency of from 10KHz to 15KHz.
6. (original): The method according to claim 1 wherein said acoustic source is located onboard an underwater support vessel.
7. (original): The method according to claim 1 wherein three acoustic beams are generated.
8. (original): The method according to claim 1 wherein said at least two generated beams are generated to maximize cavitation at said identified remote target location.
9. (currently amended): A method of generating a predetermined field of destructive cavitation around a remote

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target in an underwater environment, said method comprising the steps of:

identifying a remote target location;

generating an array of intersecting acoustic ~~beamforms~~
beams, each ~~beamform~~ beamformer producing a beam at
peak power output, from an acoustic source; and

controlling said array of intersecting ~~beamforms~~ beams to
intersect at said identified remote target location
and thereby creating the field of destructive
cavitation at said intersection.

10. (original): The method according to claim 9 wherein said remote target location is in the range of 100m to 1 km from the acoustic source.

11. (original): The method according to claim 9 wherein said remote target location is at least 100m from the acoustic source.

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12. (original): The method according to claim 9 wherein said remote target location is no more than 1 km from the acoustic source.

13. (currently amended): The method according to claim 9 wherein said acoustic ~~beamform~~ beams is generated in a frequency range of from 10KHz to 15KHz.

14. (original): The method according to claim 9 wherein said acoustic source is located onboard an underwater support vessel.

15. (currently amended): The method according to claim 9 wherein said array includes at least two acoustic ~~beamforms~~ beams.

16. (currently amended): A method of generating a predetermined field of destructive cavitation around a remote target in an underwater environment, said method comprising the steps of:

identifying a remote target location;

computing a focal point location about said identified
remote target location;

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computing beam parameters for said focal point location;

and

generating at least two acoustic ~~beam~~ beams ~~parameters~~

whereby cavitation is generated at said focal point location.